

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS FOR SCREENING TEST FOR THE POST OF LECTURER (KRIYA SHARIR) AYURVED AND INDIAN MEDICINE DEPARTMENT

PART-A

General Knowledge of Rajasthan

Culture & Heritage of Rajasthan:-

1. Dietary Practices of Rajasthan:
 - 1.1 Indigenous food- Cereal and millets, fruits and vegetables, food of various regions.
 - 1.2 Seasonal dietary practices, festivals and their Ayurvedic rationale.
 - 1.3 Tradition of fasting and *Upvas*.
2. Crops of Rajasthan:
 - 2.1 Evidence of Crop production in Pre-Historic sites of Rajasthan.
 - 2.2 Evidence of Crop production in Ancient and Medieval Rajasthan.
3. Minerals of Rajasthan- Evidence of knowledge of minerals in Ancient and Medieval Rajasthan.
4. Medicinal Herbs of Rajasthan.
5. Society of Rajasthan:
 - 5.1 Traditions, dress and ornaments, fairs & festivals.
 - 5.2 Folk and Tribal Society: Fairs and festival, social customs, social life and beliefs.
6. Making of Modern Rajasthan:
 - 6.1 Political and social awakening in 19th century.
 - 6.2 Peasant movements, tribal movements and *Prajamandal* movements in 20th century. Integration of Rajasthan.

Geography of Rajasthan:-

Broad Physical Features: Mountains, Plateaus, Plains and Deserts; Major Rivers and Lakes; Climatic Characteristics; Major Soil types and their distribution; Vegetation types and their distribution; Agricultural types; Livestock; Demographic Characteristics.

Total Questions 30

PART-B

1. Fundamental principles of Ayurvediya Kriya Sharir

- Theory of Panchamahabhuta.
- Principle of Loka-Purusha Samya.
- Importance of Samanya - Vishesha principle.
- Different views on the composition of Purusha and the importance of Chikitsya Purusha.
- Importance of Gurvadi Guna in Ayurveda.
- Mutual relationship between Triguna-Tridosha-Panchamahabhuta-Indriya.
- Mutual relationship between Ritu-Dosha-Rasa-Guna.
- Biological rhythms of Tridosha on the basis of Day-Night-Age-Season and Food intake.
- Role of Dosha in the formation of Prakriti of an individual.
- Role of Dosha in maintaining health.

2. Concepts of Tridosha

- General locations (Sthana), general attributes (Guna) and general functions (Samanya Karma) of Vata, Pitta and Kapha.
- Subdivisions of Dosha with their specific locations, specific properties, and specific functions.
- Similarities and differences between Agni and Pitta.
- Applied physiology of Tridosha principle: Kriyakala, Dosha Vriddhi-Dosha Kshaya.

3. Concept of Dhatu

- Dhatu Poshana: Process of nourishment of Dhatu. Description of various theories of Dhatu Poshan (Kshira-Dadhi, Kedari-Kulya, Khale Kapota etc).
- Dhatu: General introduction and definition of Dhatu.
- Formation, Definition (Nirukti), Distribution, Attributes, quantity, classification, Panchabhautika composition and Functions of all seven Dhatu. in detail: Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra.
- Applied physiology of Dhatu: Manifestations of Kshaya and Vriddhi of each Dhatu. Description of Dhatu Pradosaja Vikara.
- Description of Ashraya and Ashrayi kind of relationship between Dosha and Dhatu.
- Concept of Srotas and Saar.

4. Concept of Mala

- Definition of the term 'Mala'.
- Definition, Formation, Properties, Quantity and Functions of Purisha and Mutra.
- Manifestations of Vriddhi and Kshaya of Purisha and Mutra.
- Sveda – Definition, Formation, Properties, Quantity and Functions of Svedavaha Srotas.
- Formation of Sveda. Manifestations of Vriddhi and Kshaya of Sveda.
- Dhatumala – Definition, Formation, properties, Quantity, Classification and Functions of each Dhatumala.

5. Concept of Upadhatu

- General introduction and Definition of the term 'Upadhatu'. Formation, Nourishment, Quantity, Properties, Distribution and functions of each Upadhatu.
- Stanya: Characteristic features and methods of assessing Shuddha and Dushita Stanya, Manifestations of Vriddhi and Kshaya of Stanya.
- Artava: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas.
- Study of Tvak.

6. Concepts of Prakriti

- Various definitions and synonyms for the term 'Prakriti'. Factors influencing the Prakriti. Classification of Deha, Bhautika and Manas Prakriti.
- Characteristic features of the individuals belonging to each kind of Deha, Bhautika and Manas Prakriti.
- Recent advances in understanding the Prakriti.

7. Concepts of Atma, Manas and Indriya

- Physiological description of Panchajnanendriya and Karmendriya.
- Physiology of perception of Shabda, Sparsha, Rupa, Rasa, Gandha
- Indriya-pancha-panchaka.
- Manas – Definition, location (Sthana), Properties, Functions and Objects of Manas.
- Atma – Definition, Properties of Atma. Difference between Paramatma and Jivatma; Characteristic features of Atma.

8. Concepts of Nidra and buddhi

- Nidra – Definition of Nidra, Classification of Nidra.
- Tandra, physiological and clinical significance of Nidra; Svapnotpatti and Svapnabheda.
- Buddhi – Location, Types, Functions of Buddhi; Physiology of Dhi, Dhriti and Smriti,
- Physiology of special senses. Intelligence, Memory, Learning and Motivation.
- Physiology of sleep.
- Physiology of speech and articulation;
- Physiology of Pain and temperature.

9. Concept of Ahara and Ahar Pak

- Ahara: Definition, classification and significance of Ahara
- Ahara-vidhi-vidhana.
- Ashta Ahara Vidhi Viseshayatana.
- Ahara Parinamkar Bhava.
- Aharapaka (Process of digestion).
- Description of Avasthapaka, Nishthapaka and their classification.
- Separation of Sara and Kitta. Absorption of Sara.
- Genesis of Vata-Pitta-Kapha during Aharapaka process.
- Definition of the term Koshtha. Classification of Koshtha.

10. Concept of Agni

- Definition and importance, synonyms, classification, location, properties and functions of Agni.
- Jatharagni, Bhutagni, and Dhatvagni.
- Applied physiology of Agni in Kriya Sharir and Chikitsa.

11. Annavaha Srotas

- Description of Annavaha Srotas and their Mula and Annavaha Srotodusti.
- Applied physiology of Annavaha Srotas: Arochaka, Ajirna, Atisara, Grahani, Chhardi, Parinama Shula, Agnimandya.
- Grahani, Pittadhara Kala and Purishdhara Kala.

12. Modern Physiology with applied aspects

- Essentials of cell physiology.
- Membrane physiology.
- Homeostasis.
- Genetic code, its expression and regulation of gene expression.
- Essentials of cardiovascular physiology.
- Essentials of respiratory physiology.
- Gastrointestinal physiology.
- Nervous system physiology.
- Haematopoietic system and concept of blood groups.
- Muscle physiology.
- Physiology of excretion, Skin Physiology.
- Endocrine physiology.
- Physiology of male and female reproductive systems.
- Vitamins: sources, daily requirement and functions. Physiological basis of signs and symptoms of hypo and hyper-vitaminosis.
- Adipose tissue and its Function. Circulating lipids. Description of lipoproteins like VLDL, LDL and HDL and their composition.
- Physiology of immune system.

13. Instruments and bridge areas

- Recent studies in biorhythms.
- Recent advances in Neuro-Immune-Endocrine physiology.
- Recent advances in stem cell research.
- Physiograph, Computerised spirometry, Biochemical Analyzer, Pulse oxymeter, Elisa.
- Reader, Hematology Analyzer, Tread mill.

14. Practical physiology

- Nadi Pariksha, Mutra- Mala Pariksha.
- Assessment of Saar, Prakriti, Agni, Kosta, Satmya and Angula pramana.
- Haematological and urology practicals.
- Clinical examination of cardio-vascular system, respiratory system and nervous system.

15. Basics of Research Methodology

- Definition of term research and Anusandhan.
- Steps in research process.
- Information about IEC and AEC.
- Scientific writing and Publication skills.
- Research in Ayurveda.
- Literary research- Manuscriptology, data mining techniques.
- Drug research, clinical research, clinical trials.
- Latest trends in drug discovery and drug development.
- Pharmacovigilance for ASU drugs.
- Bioinformatics.
- Intellectual Property Rights.
- Basics of biostatistics.

Total Questions 120

Pattern of Question Paper:

1. Objective Type Paper
2. Maximum Marks : 300
3. Number of Questions : 150
4. Duration of Paper : 2:30 Hours
5. All Questions carry equal marks
6. Medium of Screening Test: Bilingual in English & Hindi
7. There will be Negative Marking
(For every wrong answer, one-third of marks prescribed for that particular question will be deducted).